Form PTO-1449 (modified)	Atty. Docket No. OMRF:014US	Serial No. 10/779,319
List of Patents and Publications for Applicant's INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	Applicant Michael E. Dresser Jose-Angel Conchello	
	Filing Date: February 13, 2004	Group: 2624

U.S. Patent Documents	Foreign Patent Documents	Other Art
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U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
/SCC/	A2	5,193,124	3/9/93	Subbarao	382	41	6/15/90
	A3	5,778,038	7/7/98	Brandt *et al.*	378	4	6/6/96
	A4	6,525,302	2/25/03	Dowski, Jr. *et al.*	250	201.2	6/6/01
	A5	5,671,085	9/23/97	Gustafsson *et al.*	359	385	2/3/95

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation

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Exam. Init.	Ref. Des.	Citation
/SCC/	C39	Hausler, "A method toincrease the depth of focus by two step imag processing," *Optics Communications*, 6(1):38-42, 1972.
/SCC/	C40	Hausler and Korner, "Imaging with expanded depth of focus," *Zeiss Information*, 29:9-13, 1987.
/SCC/	C41	Holmes *et al.*, "Increased depth of field and stereo pairs of fluorescence micrographs via inverse filtering and maximum-likelihood estimation," *Journal of Microscopy*, 164(Part 3):217-237, 1991.

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U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
/SCC/	A1	5,047,968	9/10/91	Carrington *et al.*	364	574	3/20/90

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
/SCC/	C1	"Computational optical sectioning microscopy of live cardiomyocytes," Computational Optical Sectioning Microscopy, htt;://216.239.57.1.../fmnotes.html+deconvolution+otf+psf+introduction&hl=en&ie=UTF, printed January 8, 2003.
/SCC/	C2	Agard, "Optical sectioning microscopy", *Ann. Rev. Biophys. Bioeng,* 13:191-219, 1984.
/SCC/	C3	Carrington *et al.*, "Superresolution three-dimensional images of fluorescence in cells with minimal light exposure," *Science*, 268:1483-1487, 1995.
/SCC/	C4	Carrington, "Image restoration in 3D microscopy with limited data" in SPIE Vol 1205 *Bioimaging and two-dimensional spectroscopy* L. C. Smith, editor SPIE press., 72-83, 1990.
/SCC/	C5	Christou, "Deconvolution algorithms," *Center for Adaptive Optics.*
/SCC/	C6	Conchello and Yu, "Parametric blind deconvolution of fluorescence microscope images: Preliminary results," in *Three-Dimensional microscopy: image acquisition and processing* C. J. Cogswell, G. S. Kino, and T. Wilson, editors, Proceedings of the SPIE 2655, 164-174, 1996.
/SCC/	C7	Conchello and McNally "Fast regularization technique for expectation maximization algorithm for computational optical sectioning microscopy," in *Three-Dimensional microscopy: image acquisition and processing III*, C. J. Cogswell, G. Kino, and T. Wilson, editors. Proc. SPIE 2655:199-208, 1996.
/SCC/	C8	Conchello and McNally, "Subpixel resolution in maximum likelihood image restoration" in *Three-Dimensional microscopy: image acquisition and processing IV*, C. J. Cogswell, J. A. Conchello, and T. Wilson, editors. Proc. SPIE 2984:158-168, 1997.

25435795.1

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Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
/SCC/	C9	Conchello *et al.*, "Enhanced 3-D Reconstruction from Confocal Scanning Microscope Images. II: Depth Discrimination vs. Signal-to-Noise Ratio in Partially Confocal Images," *Appl. Opt.-Information Processing*, 33(17):3740-3750, 1994.
/SCC/	C10	Conchello, "Super-resolution and convergence properties of the expectation maximization algorithm for maximum-likelihood deconvolution of incoherent images," *Journal of the Optical Society of America-A*, 15(10):2609-2619, 1998.
/SCC/	C11	Conchello, and Hansen "Enhanced 3-D reconstruction from confocal scanning microscope images. I: Deterministic and maximum likelihoodreconstructions," *Applied Optics*, 29(26):3795-3804, 1990.
/SCC/	C12	Fay *et al.*, "Three-dimensional Molecular Distribution in Single Cells Analyzed Using the Digital Imaging Microscope," *Journal of Microscopy*, 153:133-149, 1989.
/SCC/	C13	Holmes "Expectation-maximization restoration of band limited, truncated point-process intensities with application in microscopy" J. Opt. Soc. Am.-A 6(7) pp1006-1014 (1989).
/SCC/	C14	Holmes and Liu "Acceleration of maximum-likelihood image restoration for fluorescence microscopy and other noncoherent imagery," *J. Opt. Soc. Am.-A*, 8(6):893-907, 1991.
/SCC/	C15	Holmes *et al.* "Light microscopic images reconstructed by maximum likelihood deconvolution" Chapter 24 in *Handbook of biological confocal microscopy*, 2nd edition, J. B. Pawley, editor, 389-402, 1995.
/SCC/	C16	Holmes Liu "Richardson-Lucy/maximum likelihood image restoration algorithm for fluorescence microscopy: further testing" Appl. Opt. 28 (22) pp4930-4938 (1989)
/SCC/	C17	Holmes, "Maximum-likelihood image restoration adapted for noncoherent optical imaging," *Journal of the Optical Society of America A*, 5(5):666-673, 1988.
/SCC/	C18	Liu and Holmes, "2D and 3D fluorescence microscopy by maximum likelihood estimation: Micrograph results," *Microscopy Society of America Bulletin*, 23(2):189-198, 1993.
/SCC/	C19	Loew *et al.*, "Imaging in five dimensions: Time-dependent membrane potentials in individual mitochondria," *Biophysical Journal*, 65(12):2396-2407, 1993.
/SCC/	C20	Malkusch *et al.*, "Digital light microscopy: Prerequisite for optimum enhancement and increase of resolution," *Experimental Gerontology*, 36:1199-1217, 2001.

25435795.1

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Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
/SCC/	C21	Markham and Conchello, "Fast maximum-likelihood image restoration algorithms for three-dimensional fluorescence microscopy," *Journal of the Optical Society of America-A.*, 18(5): 1062-1071, 2001.
/SCC/	C22	Markham and Conchello, "Parametric blind deconvolution: a robust method for the simultaneous estimation of image and blur," J. Opt. Soc. Am. A., 16(10):2377-2391, 1999.
/SCC/	C23	Markham and Conchello, "Tradeoffs in regularized maximum-likelihood image restoration," in Three-Dimensional Microscopy: Image Acquisitionand Processing IV. C Cogswell, J. A. Conchello, and T. Wilson Editors. Proc. SPIE 2984-18:136-145, 1997.
/SCC/	C24	Rizzuto *et al.*, "Digital imaging microscopy of living cells," Trends in Cell Biology, 8(7):288-292, 1998.
/SCC/	C25	Schaefer *et al.*, "Generalized approach for accelerated maximum likelihood based image restoration applied to three-dimensional fluorescence microscopy" *Journal of Microscopy*, 204(2):99-107, 2001.
/SCC/	C26	Van der Voort, "Theory and practice of 3D image restoration," *Scientific Volume Imaging B.V.*, 1-38, Hilversum, Netherlands.
/SCC/	C27	Van Kempen *et al.*, "Application of image restoration algorithms for confocal fluorescence microscopy" in *Three-dimensional microscopy: Image acquisition and processing*, IV C. J. Cogswell, J.-A. Conchello, and T. Wilson, Editors Proc. SPIE 2984:114-124, 1997.
/SCC/	C28	van Kempen *et al.*, "Comparing maximum likelihood estimation and constrained Tikhonov-Miller restoration as applied to confocal microscopy," *IEEE Engineering in Medicine and Biology*, 76-83, 1996.
/SCC/	C29	Verveer and Jovin "Acceleration of the ICTM image restoration algorithm" *Journal of Microscopy*, 188 (part 3):191-195, 1997.
/SCC/	C30	Verveer and Jovin "Efficient superresolution restoration algorithms using maximum a posteriori estimations with applications to fluorescencemicroscopy" Journal *of the Optical Society of America-A*, 14(8):1696-1706, 1997.
/SCC/	C31	Verveer and. Jovin "Image restoration based on Good's roughness penalty with application to fluorescence microscopy," *J. Opt. Soc. Am.-A*, 15(5):1077-1083, 1998.
/SCC/	C32	Verveer and. Jovin "Improved restoration from multiple images of a single object: application to fluorescence microscopy," *Applied Optics*, 37(26): 6240-6246, 1998.

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/SCC/	C33	Verveer *et al.*, "A comparison of image restoration approaches applied to three-dimensional confocal and wide-field fluorescence microscopy," *Journal of Microscopy*, 183 (1):60-61, 1999.
/SCC/	C34	Verveer *et al.*, "Superresolution MAP algorithms applied to fluorescence imaging," in *Three-dimensional microscopy: Image acquisition and processing* IV C. J. Cogswell, J.-A. Conchello, and T. Wilson, Editors. *Proc. SPIE*, 2984:125-135, 1997.
/SCC/	C35	Verveer *et al.*, "Theory of confocal fluorescence imaging in the programmable array microscope (PAM)," *Journal of Microscopy*, 189(3):192-198, 1998.
/SCC/	C36	Häusler and Körner, "Imaging with expanded depth of focus," *Zeiss Inform.*, 29:9-13, 1986.
/SCC/	C37	Häusler, "A method to increase the depth of focus by two step image procesing," *Optics Communications*, 6(1):38-42, 1972.
/SCC/	C38	Holmes *et al.*, "Increased depth of field and stereo pairs of fluorescence micrographs via inverse filtering and maximum-likelihood estimation," *Journal of Microscopy*, 164(pt 3):217-237, 1990.

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